## Veris White Paper Using Veris Energy Meters in LEED Certification

LEED certification credits include a number of energy monitoring criteria. To satisfy the requirements for these credits and earn the corresponding LEED points, a building owner or energy system designer must prove that the building's energy usage patterns conform to efficiency standards.

Every LEED program has energy use credits (see table below). To earn these points, the building owner must demonstrate that energy use in the building conforms to efficiency requirements by designing an energy-efficient building.

Numerous choices can be made in this design process, including the use of renewable energy, on-site generation of some portion of energy, or use of demand response data from the utility company to adjust consumption based on peak and off-peak usage times. To adopt any of these approaches requires accurate quantification of the building's energy use patterns.

This can be easily accomplished using any of Veris Industries' energy meters. We offer a variety of energy meters designed to monitor and record power use. Our meters can measure incoming power in the mains, or they can measure power usage at the branch level. Energy consumption data is recorded with high accuracy. A meter can first measure baseline energy use, and then it can track energy use reductions as more efficient practices are implemented. LEED points are awarded based on the efficient use of energy throughout the building. Proof of the energy design's effectiveness has never been easier to measure than with a Veris power meter.

Veris meters are designed for easy installation in an existing electrical panel. Data collection devices can be networked with a building control system for a fully integrated electrical load management system. Veris meters feature a variety of outputs for application flexibility. Call a Veris Industries sales representative to select the best energy metering device for your LEED design.

Program	Criteria	Requirement	Products Available
Existing Buildings	EA 1 Case 1 (1-18 points)	"Have energy meters that measure all energy use throughout the performance period of buildings to be certified."	<ul> <li>Power monitoring – Enercept (H80xx Series)</li> <li>Power monitoring plus extended data collection – H84xx</li> <li>Tenant submetering – H81xx</li> </ul>
	EA 2.1 (2 points)	"Document the breakdown of energy use in the building."	<ul> <li>Power monitoring at the branch level – E30, E31</li> <li>Cost allocation for utility bills (up to 92 circuits) – E30, E31</li> <li>Power distribution panels with branch circuits larger than 100 A – H8238</li> <li>Submetering applications for one 3-phase tenant – H81xx</li> </ul>
	EA 3.2 (1-2 points)	"Develop a breakdown of energy use in the building Based on the energy use breakdown, employ system-level metering covering at least 40% or 80% of the total expected annual energy consumption of the building. Permanent metering and recording are required."	
	EA 4 (1-6 points)	"Meet some or all of the building's total energy use with on-site or off-site renewable energy systems." (Points awarded based on the percentage of total energy consumed that comes from renewable sources.)	<ul> <li>For use with solar energy collection systems – Enercept (H80xx Series)</li> <li>Power monitoring plus extended data collection – E50 Series</li> </ul>
New Construction	EA 1 (1-19 points)	"Quantify energy performance compared with a baseline building."	Meeting this criteria requires an integrated energy monitoring package throughout the facility. • For mains up to 2400 A — Enercept (H80xx Series) • For individual circuits — H81xx, H8238, E30, E31, E50
	EA 2 (1-7 points)	"Calculate project performance by expressing the energy produced by the renewable systems as a percentage of the building's annual energy cost."	
	EA 5 (3 points)	"Install necessary metering equipment to measure energy use."	
	EA 6 (2 points)	"Provide at least 35% of the building's electricity from renewable sources."	<ul> <li>For use with solar energy collection systems – Enercept (H80xx Series)</li> <li>Power monitoring plus extended data collection – E50 Series</li> </ul>